11th Annual MLTI Student Conference
Block 3 Student Workshop Sessions
1:25 PM - 2:10 PM

Block 3 (1:25 PM - 2:10 PM) Student Speakers

Project RoboGoby Limbeck Engineering LLC - Liam Wade, Nick Nelsonwood, Josef Biberstein, and Travis Libsack, Freeport High School

RoboGoby is a collaborative submersible ROV project spearheaded by Limbeck Engineering LLC, a partnership of four high school students from Freeport High School. The goal is to develop an affordable ROV with both scientific and commercial applications. The ROV is based on an embedded linux platform, with Arduino derivative micro-controllers that will manage various sensors and motors. RoboGoby will have five degrees of maneuverability and will be capable of depths over 250ft. The ROV will have a variety of sensors (including temperature, depth, etc), stereoscopic cameras, advanced lighting, and will house an expandable payload bay for mission specific equipment.

A unique feature of RoboGoby will be its ability to remotely station keep while wireless streaming live video and data. Over the past year Limbeck Engineering has kept a blog with more specific information on the project. If you'd like to learn more about what we're doing, please check out the blog before the conference (http://robogoby.blogspot.com).

Coding After School Stephen Kaplan, Marshwood Middle School

Stephen will be presenting a keynote that tells of his journey creating the Coding After School program, along with how he got started coding, and how others can start similar programs at their schools. Using examples, he will give an overview of the lessons he has created and share some student-created work. He will share future plans and improvements to the program and how the program has developed since its initial creation.

Stephen Kaplan is an eighth grade student at Marshwood Middle School in Eliot, Maine who loves to code. Having grown up in South Berwick, Maine, Stephen is a deepthinker whose interests include coding, school, soccer, and science. He is a part of the school's band and chorus programs. Ever since he was introduced to the idea of code by his sister, Toni, he has challenged himself to create, invent, and become a master of the thing he loves most to do.

He is proficient in many coding languages, including HTML, CSS, and JavaScript, along with Java, PHP, Lua, and more. He has participated in coding classes and advanced schooling classes at M.I.T (Massachusetts Institute of Technology) through their HSSP, Spark, and Splash programs. In 2013, he began a program at the school that had a goal to teach students about the evermore important world of coding. His

personal goal for the project was to simply give the students an idea of what the world of code is, but the Coding After School program quickly began much more than that.

After no more than a week after the program began, it became clear that Stephen had created something that was a true culture changer. A few weeks into the program, Stephen was contacted and invited to be a keynote speaker for the 2014 MLTI Conference at the University of Maine, Orono. He will also be presenting two 80-minute workshops on Lua while there. He can be contacted at stephen.kaplan@rsu35.com

Chris Jones, former student Oak Hill High School
In 2011, Chris Jones came to share his story on how MLTI influenced him to be passionate about technology and education. This year, Chris returns to give us an update on what he's been up to and to share his experiences in college and living in Boston. Focusing in Business Management, Chris will give his perspective on the role of technology and business here in the state of Maine and why it's a great opportunity for young people.